

Serial No. 10/069,578

ASA-1070

Amendment

Response to Office Action mailed September 4, 2007

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listing of claims in the application.

Listing of Claims

1. (Withdrawn) An automatic analyzer comprising a rack standby disk capable of rotating and stopping in a state, in which a plurality of racks holding specimens are made to standby, and receiving racks from a rack supply section; rack reciprocating transfer means provided to correspond to an analysis unit or units, which implement analysis and treatment of a specimen or specimens, and acting to receive a single rack from the rack standby disk and transfer the same toward a specimen sampling position on the analysis unit, and to return the single rack, from which a specimen for analysis and treatment is sampled in the specimen sampling position, to the rack standby disk, carrying-out means for carrying out that rack on the rack standby disk, which has been subjected to the sampling of a specimen, toward a rack recovery section, and a control unit for controlling rack transfer operation in the rack standby disk, the rack reciprocating transfer means and the carrying-out means.

2-11 (Cancelled)

12. (Withdrawn) In a rack delivery device including a supply area, in which a plurality of pretreatment racks holding specimens prior to sampling of specimens are moved, and a

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recovery area, into which aftertreatment racks having been subjected to sampling of specimens for analysis, the improvement comprising a rack standby disk capable of holding in a mixed state the pretreatment racks, the aftertreatment racks, control racks holding specimens for quality control, and cleaning liquid racks holding a cleaning liquid, and operatively rotated to stop in a pretreatment rack receipt position where the pretreatment racks are received, an aftertreatment rack carrying-out position where the aftertreatment racks are carried out for recovery, and an access position for analysis where the pretreatment racks are carried out toward an analysis unit or units; an evaporation protecting chamber, in which air is made by means of a humidifier higher in humidity than an outside air and the rack standby disk 5 is disposed to be rotatable; a rack supply passage permitting the pretreatment racks to be conducted to the pretreatment rack receipt position from the supply area; a rack recovery passage permitting the aftertreatment racks positioned in the aftertreatment rack carrying-out position to be conducted to the recovery area; and a control unit for controlling transfer of racks on the rack standby disk, the rack supply passage and the rack recovery passage.

13. (Withdrawn) A rack transfer method comprising the steps of: receiving racks from a rack supply section into a rack standby disk capable of rotating and stopping in a state, in which a plurality of racks holding specimens are made to standby; transferring a single rack toward a specimen sampling position on an analysis unit from the rack standby disk by means of rack reciprocating transfer means provided to correspond to an analysis unit or units, which implement analysis and treatment of a specimen or specimens; returning the single rack, from

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which a specimen for analysis and treatment has been sampled in the specimen sampling position, to the rack standby disk by means of the rack reciprocating transfer means; and carrying out that rack on the rack standby disk, toward a rack recovery section.

14-15 (Cancelled)

16. (Currently Amended) An automatic analyzer comprising:

~~a rack standby disk capable of rotating and stopping in a state that a plurality of racks holding specimens are made to standby thereon;~~

a rack feed line for transferring common racks holding specimens to be analyzed and specific racks holding specific liquids to be repeatedly sampled as needed for analysis of the specimens ~~the racks~~ from a rack supply section ~~to the rack standby disk;~~

a rack standby disk receiving the common and specific racks from the rack feed line, rotating and stopping in a state such that the plurality of common and specific racks are made to stand by thereon in a mixed state;

a rack recovery line for transferring the racks on the rack standby disk towards a rack recovery section;

a rack transfer means operating to transfer the common and specific racks from the rack standby disk to a specimen sampling position on an analysis unit and to return the common and specific racks, from which the specimens and specific liquids have been sampled in the specimen sampling position, to the rack standby disk; and

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a control unit controlling transfer of the racks such that the specific rack on the rack standby disk ~~when a specific rack, which holds a specific liquid to be repeatedly sampled as necessary, is standing by on the rack standby disk, the specific rack is kept standing by on the~~ rack standby disk until a subsequent time of measurement with the specific rack.

17. (Previously Presented) The automatic analyzer according to claim 16, wherein said rack standby disk is disposed in a rack delivery unit.

18. (Previously Presented) The automatic analyzer according to claim 16, wherein a position of the rack standby disk for receipt of a pretreatment rack from the rack feed line which a specimen is to be sampled and a position of the rack standby disk for carrying-out of an aftertreatment rack from which a specimen has been sampled are used in common.

19. (Previously Presented) The automatic analyzer according to claim 16, wherein said rack standby disk is disposed in an evaporation protecting chamber, in which air is maintained higher in humidity than an outside air.

20. (Previously Presented) The automatic analyzer according to claim 19, wherein said evaporation protecting chamber is provided with a humidifier having a humidity sensor, which is operatively controlled to maintain an interior of the evaporation protecting chamber at a predetermined humidity or higher.

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21. (Previously Presented) The automatic analyzer according to claim 16, wherein said control unit controls transfer of an emergency rack as one of the racks an holding a specimen, which needs urgent measurement, said emergency rack being received by said rack standby disk, and, when said rack standby disk holds the emergency rack, another one of the racks for which sampling and treatment of a specimen is being performed in said analysis unit, is suspended and temporarily returned onto the rack standby disk, wherein the emergency rack is transferred to the specimen sampling position on the analysis unit from the rack standby disk and returned to the rack standby disk after the sampling and treatment of the specimen, and wherein the suspended rack is then transferred to the specimen sampling position on the analysis unit from the rack standby disk so that the sampling and treatment of the specimen are resumed for the suspended rack.

22. (Currently Amended) An automatic analyzer comprising:

~~a rack standby disk capable of rotating and stopping in a state that a plurality of racks holding specimens are made to standby thereon;~~

a rack feed line for transferring common racks holding specimens to be analyzed and specific racks holding specific liquids to be repeatedly sampled as needed for analysis of the specimens ~~the racks from a rack supply section to the rack standby disk;~~

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a rack standby disk receiving the common and specific racks from the rack feed line, rotating and stopping in a state such that the plurality of common and specific racks are made to stand by thereon in a mixed state;

a rack recovery line for transferring the racks on the rack standby disk towards a rack recovery section;

a rack transfer means operating to transfer the common and specific racks from the rack standby disk to a specimen sampling position on an analysis unit and to return the common and specific racks, from which the specimens and specific liquids have been sampled in the specimen sampling position, to the rack standby disk; and

a control unit controlling transfer of the racks in a manner that after a preceding rack is returned to the rack standby disk from the specimen sampling position, a subsequent rack is transferred via the rack transfer means.

23. (Previously Presented) The automatic analyzer according to claim 22, wherein said control unit controls transfer of the racks in a manner that so long as the sum of the number of racks actually held on the rack standby disk and the number of racks present on transfer passages of the rack transfer means is smaller than the number of racks that can be held on the rack standby disk, a fresh rack from the rack supply section is received on the rack standby disk.

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24. (Previously Presented) The automatic analyzer according to claim 22, wherein said analysis units are multiple units including biochemical analysis units which analyze items of biochemical analysis and immunity analysis units which analyze items of immunity analysis, and said control unit controls transfer of the racks in a manner that when a rack holding a specimen, for which items of biochemical analysis and items of immunity analysis are to be analyzed, is received on the rack standby disk, the rack is transferred to the immunity analysis unit from the rack standby disk before being transferred to the biochemical analysis unit, and after the rack having been subjected to sampling and treatment of the specimen in the immunity analysis unit is returned to the rack standby disk, the rack is transferred to a specimen sampling position on the biochemical analysis unit from the rack standby disk.

25. (Previously Presented) The automatic analyzer according to claim 22, wherein said control unit controls transfer of the racks in a manner that until re-measurement is decided on the basis of results of analysis of a specimen sampled at any analysis unit, a rack having been subjected to sampling and treatment of the specimen is kept standing by on the rack standby disk, and when re-measurement is necessary, the rack having stood by is again transferred to the specimen sampling position on the analysis unit from the rack standby disk.